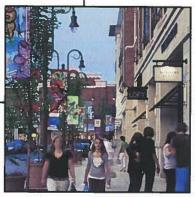
Dulles Town Center Design Guidelines August 2009







A DEVELOPMENT OF







Dulles Town Center Design Guidelines

Loudoun County, Virginia April 2009

> Applicable to Loudoun County ZMAP 2007-0001

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Vision for Dulles Town Center - Urban Center & Surrounding Area

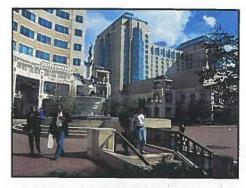
The entire 554 acre property known as Dulles Town Center is planned to develop as a vibrant mixed use community featuring high-quality office, fine dining and shopping, and urban living opportunities. Upon completion it will create a distinctive environment rich in features and activities to bring residents and visitors to its streets.

Within the Dulles Town Center's Urban Center, streets and blocks will form the basic backbone of the district by providing a clearly structured grid network with a hierarchy of streets. This rectilinear pattern of small blocks will contribute to the Urban Center's readability, slow vehicular traffic, and encourage pedestrian use.

The importance of sidewalks as public space is essential for a successful Urban Center. At Dulles Town Center the pedestrian zone will be designed to enrich the public walk, buffer pedestrians from vehicular traffic, and contribute to the vitality of the businesses and residences.

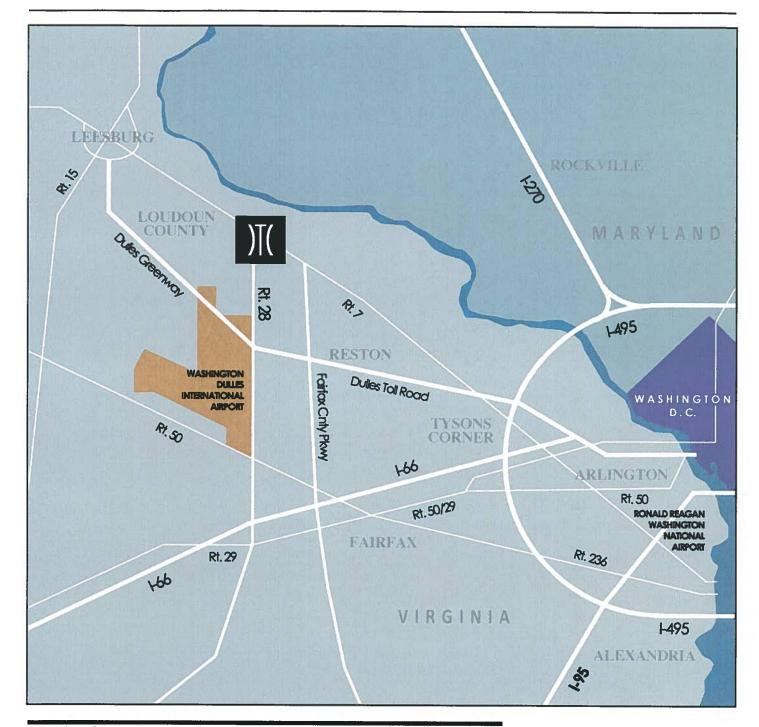
Within The Corporate Office Park to be developed fronting Route 28, these Guidelines provide a framework for the development of a corporate park-like environment featuring signature office buildings within a campus-like setting. Landscaping and natural preservation areas should be provided where practical to screen parking and allow buildings to be the prominent features viewed from major roadways, and civic park spaces should be provided throughout this development.

section



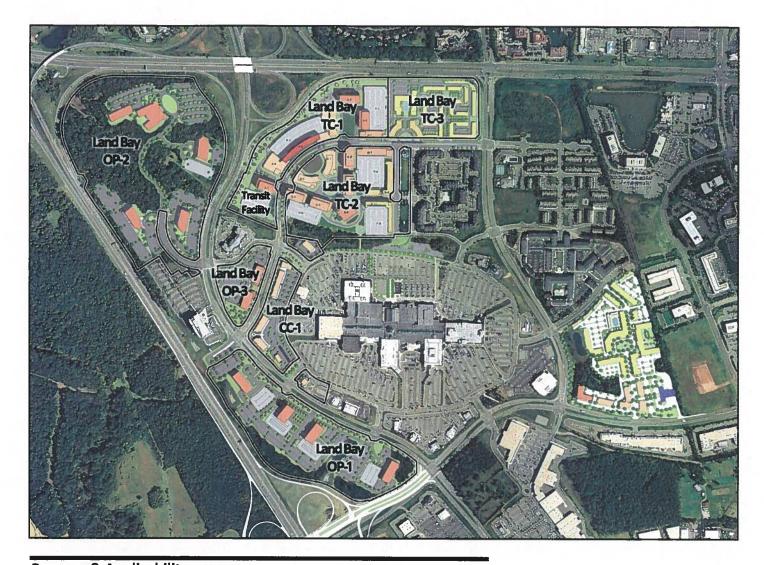






Location & Overview

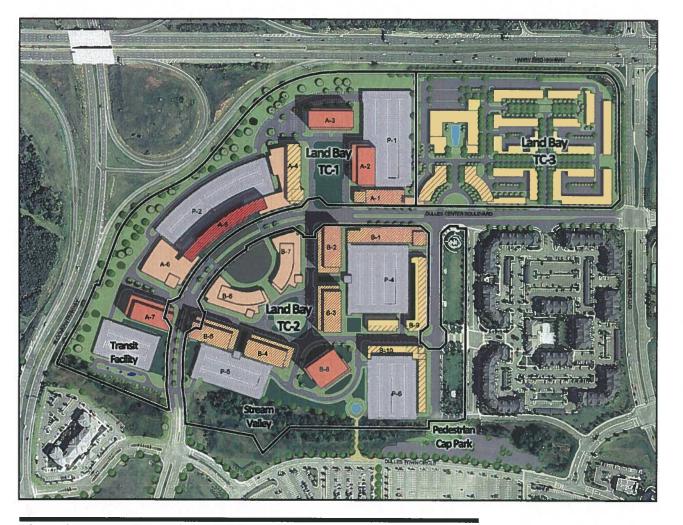
Dulles Town Center is a 554-acre master planned live-work-play community strategically situated at the southeast corner of Routes 7 and 28 in eastern Loudoun County. Dulles Town Center has been carefully planned to provide all the essentials for a quality lifestyle for working and living. Offices, shopping, restaurants, hotels, and residential areas blend into a highly livable northern Virginia community that is long on convenience and short on commuting.



Purpose & Applicability

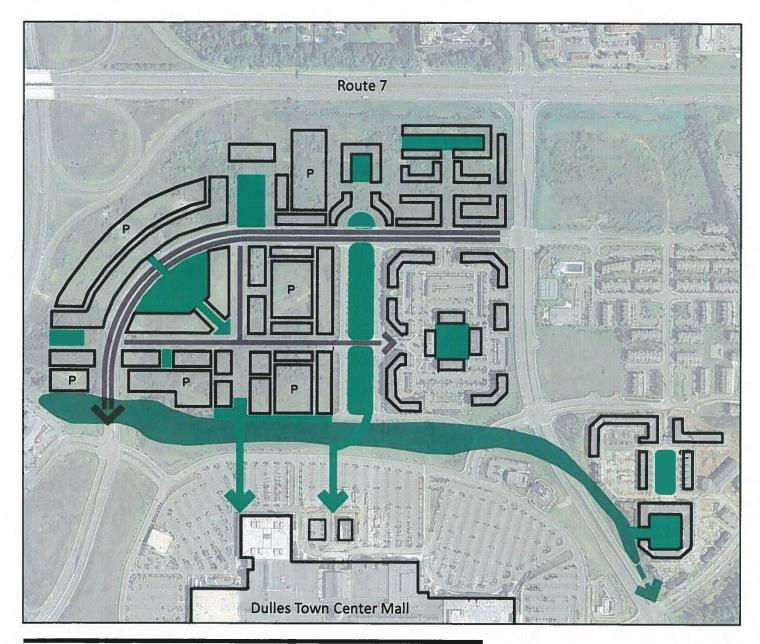
These Design Guidelines are provided to define generally an overall anticipated land plan and general form for the Urban Center and Corporate Office Park subject to Loudoun County ZMAP 2007-0001. The Guidelines will help to ensure a built environment that is pedestrian-oriented and serves a dynamic mix of uses with well-designed streetscapes and public spaces. As it takes years to realize the full potential of a new development, these Design Guidelines should provide for a general form of development while allowing flexibility to address changing market opportunities. Plan graphics provided within the Design Guidelines are illustrative in nature and are meant to represent one possible design solution.

These Design Guidelines, where identified, will apply to the Urban Center (Land Bays TC-1, TC-2, & TC-3), the Corporate Office Park (OP-1, OP-2, OP-3), and the Commercial Center (CC-1) as shown in the Loudoun County Zoning Map Amendment 2007-0001.



The Urban Center at Dulles Town Center

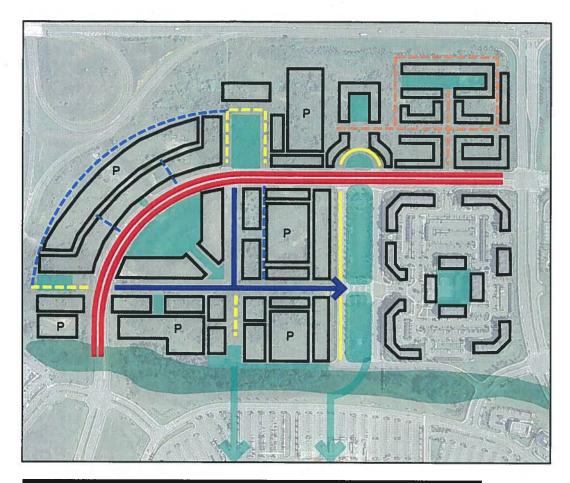
section



Organizing Diagram

Development within the Urban Center will generally:

- Develop along a rectilinear pattern of small blocks defined by streets that terminate in other streets.
- Provide an interconnected network of parks and public gathering spaces that promote a walkable district and create a seamless transition between the Urban Center and the existing and future Dulles Town Center Mall.





Street Hierarchy

The design of internal streets and parking areas will both ensure efficient vehicular circulation within the Urban Center as well as create a pedestrian friendly environment. Internal streets, where feasible, will be characterized by well-landscaped sidewalks, aesthetically pleasing street furniture in appropriate locations, and a clear focus on pedestrian mobility throughout the site. Pedestrian comfort shall be a primary consideration of the street design and design conflict between vehicular and pedestrian movement should generally be decided in favor of the pedestrian.

Within the Urban Center (Land Bays TC-1, TC-2, & TC-3, Refer to Page 2-1), the hierarchy of streets includes four categories: Types A, B, C, and D (identified on Sheet 10 of the ZMAP Concept Development Plan).

The Type A Street, Dulles Center Boulevard, will serve as a central feature of the Urban Center, providing for pedestrian and vehicular connections to City Center Boulevard and Atlantic Boulevard.

Type B Streets within the Urban Center provide internal connectivity and, similar to the Type A Street, provide an active pedestrian friendly environment with access, where determined feasible, to ground floor retail. Type A and B Streets will generally be provided as depicted above and on Sheet 10 of the ZMAP Concept Development Plan.

Type C Streets provide a quieter street setting and connections within the peripheral areas of the Urban Center. Generally streets within the Urban Center and not depicted as Type A or Type B Streets will be classified as Type C Streets.

Type D Streets will function similarly to Type C Streets but will serve blocks consisting primarily of residential units and should be designed for local traffic.

Alleys will be provided in blocks as necessary to ensure safe vehicular access, loading, and emergency vehicle access to all areas of the Town Center.

General Block and Street Guidelines

While Type A, B, C and D Streets are distinct and will reflect guidelines specific to each street type, the following general standards apply throughout the Urban Center:

Building & Parking Setbacks

Type A & B Streets

- Buildings will be setback a maximum of twenty-feet (20") from back of curb. In
 cases where the Mass Transit Facility and Commuter Parking Lot and/or open
 spaces such as plazas, courtyards, greens, and other outdoor gathering places abut
 the street, buildings will not be subject to the maximum setback requirement.
- Arcades, galleries, and sidewalk cafes may be allowed to encroach into the setback provided that a minimum 5' clear path is maintained.
- Off-street surface parking will be setback a minimum of 25' from back of curb along Type A Streets and a minimum of 20' from back of curb along Type B Streets. Refer to the Parking description in these Design Guidelines for further requirements.

Type C Streets

- Buildings will be setback a maximum of twenty-five feet (25') from the back of curb. In cases where the Mass Transit Facility and Commuter Parking Lot and/or open spaces such as plazas, courtyards, greens, and other outdoor gathering places abut the street, buildings will not be subject to the maximum setback requirement.
- Arcades, galleries, and sidewalk cafes may be allowed to encroach into the setback provided that a minimum 5' clear path is maintained.
- Off-street surface parking will be setback a minimum of 15' from back of curb.
 Refer to the Parking description in these Design Guidelines for further requirements.

Type D Streets

- Buildings will be setback a maximum of sixteen feet (16') from the back of curb. In
 cases where the Mass Transit Facility and Commuter Parking Lot and/or open
 spaces such as plazas, courtyards, greens, and other outdoor gathering places abut
 the street, buildings will not be subject to the maximum setback requirement.
- Arcades, galleries, and sidewalk cafes may be allowed to encroach into the setback provided that a minimum 5' clear path is maintained.

Block Standards

- When completed in its entirety, a minimum of 80% of all block frontages on Type
 A and B Streets as depicted on the Concept Development Plan will be lined by
 buildings. Block frontages for the Mass Transit Facility, outdoor plazas, parks, and
 other outdoor gathering spaces are excluded from this calculation.
- When completed in its entirety, at least 70% of the total of all Type A & B block frontages within the Town Center Core shall be occupied by pedestrian oriented businesses on the ground floor, preferably retail stores and shops.

At least forty 40% of the total of all Type A & B block frontages within TC-1 and TC-2 Fringe and the total of Type C block frontages along Hadley's Park within TC-2 Fringe shall be occupied by pedestrian oriented businesses on the ground floor, preferably retail stores and shops.

Block frontage at the Mass Transit Facility and Commuter Parking Lot and/or open spaces such as plazas, courtyards, greens, and other outdoor gathering places will be excluded from this calculation.

- The perimeter of a full block should not exceed 2,000 linear feet measured at the curb. Blocks including structured parking should not exceed 3,000 linear feet measured at the curb.
- Blocks over 400' in length will have a mid-block feature such as a pedestrian way or other features such as a plaza, park or promenade, or an entrance / driveway.

Street Trees

- Street trees will be provided at an average minimum spacing distance of 1 per 30' along both sides of Type A, B, C, and D Streets.
- Spacing of trees may vary, however, to allow for unique building features, retail
 visibility, street intersections, alley and drive entrances, utility locations, and other
 site constraints.
- Street trees should add to the comfort and scale of streets while protecting visibility of businesses and signage from the street. Along pedestrian oriented streets in the Urban Center, particularly along Type A and B Streets where ground floor oriented businesses are provided, street tree species should be selected to provide a canopy height that does not obstruct visibility. Street trees will be maintained with limbs trimmed to allow for visual surveillance, pedestrian comfort, and store front / signage visibility.
- Selected street tree species should be durable and tolerant of soil compaction and other urban conditions.
- Street tree locations should be selected to not interfere with lighting distribution.





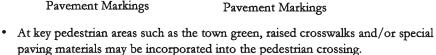
Crosswalks and Pedestrian Right-Of-Way

Pedestrian crosswalks at intersections are a critical element of the pedestrian network and should be provided at all signalized intersections. At non-signalized intersections, pedestrian crosswalks will be evaluated and as warranted due to heavy traffic, significant pedestrian movement, and/or pedestrian safety concerns.

Pedestrian crosswalks should include the following features:

- · Accessible curb ramps
- · Pavement markings that clearly mark the pedestrian crosswalk.
- Minimum 10' wide pavement markings of either the parallel bar or ladder style.





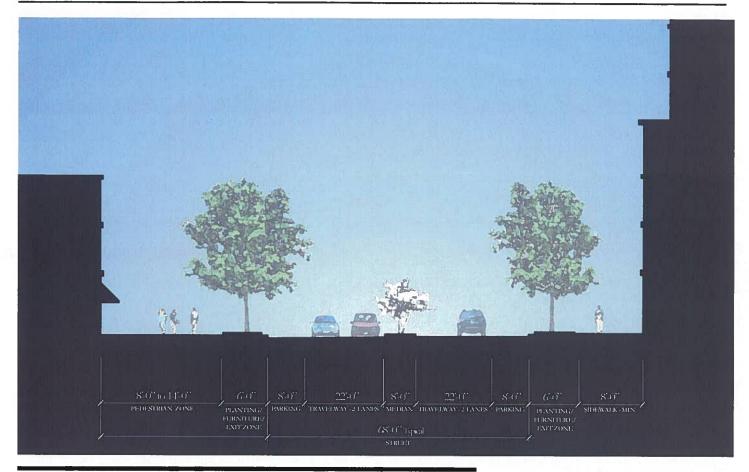
- Where on-street parking is provided, curb extensions should be used to shorten crossing distance and increase pedestrian visibility.
- Median refuges should be provided along the Type A Street.

Midblock Crossings

- Midblock crossings should be provided where significant demand is likely, such as at parks and plazas, at the end of major pedestrian ways, and at significant traffic generating locations such as the transit facility and major commercial tenants.
- Generally midblock crossings should be provided no farther than 200 300 feet apart within the Town Center Core along the Type A Street.
- Pedestrian walkways not along streets should provide appropriate levels of graphics and lighting in order to identify pedestrian walkways.





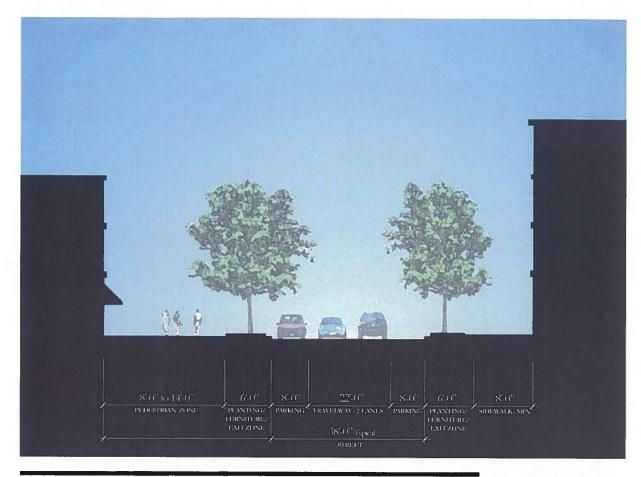


Type A Streets - Boulevard

The Type A Street is a primary organizing element of the Urban Center and provides connections to other parts of Dulles Town Center and the broader community at large. Within the Urban Center the existing street, Dulles Center Boulevard, will be redesigned as an active pedestrian environment lined with retail shops, restaurants, residences, offices, and public gathering spaces. Traffic calming elements such as narrower lane widths, parallel parking, and streetscape design should be provided to create a focus on pedestrian access and provide for a high level of service. Additional traffic calming features may be provided in high traffic areas. Street design will facilitate pedestrian circulation and connectivity across the street, with mid-block crossings, and ensure pedestrian comfort and safety through design.

Design Standards for Dulles Center Boulevard:

- Type A Street should be designed to minimize unnecessary vehicular intersections by minimizing direct access to parking and loading areas. Where such entrances are planned, they will be located with regard to the safety and convenience of pedestrians.
- 2 lanes in each direction 11' travel lanes.
- 8' parallel parking area on each side of the street, where practical.
- Curb extensions into the parallel parking area at key intersections.
- Up to 8' median with pedestrian refuges at pedestrian crossings. The median need not be raised and planted in all areas such as adjacent to the Town Green and/or Civic Plaza where pedestrian treatments may be extended across the travelway to allow for special events.
- Low design speeds.
- Maximum 25' curb radii where practical.
- Sidewalks that are a minimum 8' in width.
- A 2' vehicle exiting zone adjacent to the curb to accommodate access to parallel parked vehicles.
- A minimum 4' planting and furniture zone between the vehicle exiting zone and sidewalk. Planting need not be continuous but can provide breaks that may accommodate furniture or other features.
- Provide pedestrian-scale lighting. Street-scale lighting may be provided as necessary, but should be complimentary to the pedestrian-scale lighting.
- Gateway enhancements such as building design, landscaping, fountains, monument markers, signage, and/or art should be provided to mark transition areas into and out of the Urban Center.

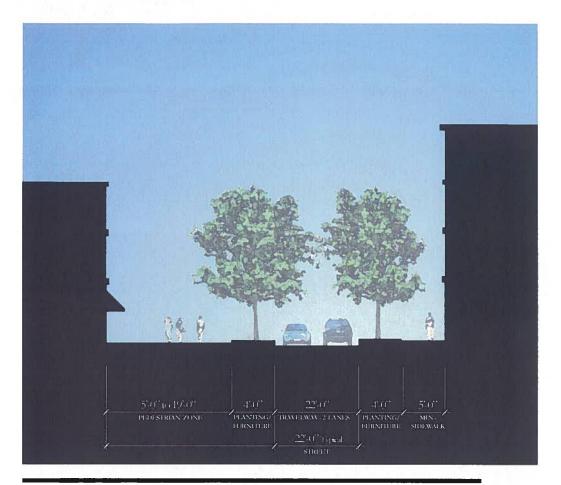


Type B Streets - Avenue

The Type B Streets will allow for a narrower street section and provide internal circulation routes into key areas of the Urban Center. Similar to the Type A Street, Type B Streets will act as a focal point for community activities and should be fronted by a mix of uses encouraging daytime and evening activities. Street design should ensure that the space between the buildings contributes to a comfortable pedestrian environment, providing adequate space for efficient circulation but also providing a sense of enclosure that supports useable pedestrian spaces.

Design Standards for Type B Streets:

- Type B Streets will be designed to allow access to parking and loading areas. Where such entrances are provided, they should be located with regard to the safety and convenience of pedestrians.
- 2 lanes (one each direction) 11' travel lanes.
- 8' parallel parking area on each side of the street, where practical.
- Curb extensions into the parallel parking area at key intersections.
- · Low design speeds.
- Maximum 20' curb radii at intersections with Type C & D Streets where practical, and 15' maximum at alleys where practical. Larger curb radii may be required at intersections with Dulles Center Boulevard.
- Sidewalks that are a minimum 8' in width.
- A 2' vehicle exiting zone adjacent to the curb to accommodate access to parallel parked vehicles.
- A minimum 4' planting and furniture zone between the vehicle exiting zone and sidewalk. Planting need not be continuous but can provide breaks that may accommodate furniture or other features.
- Provide pedestrian-scale lighting. Street-scale lighting may be provided as necessary, but should be complimentary to the pedestrian-scale lighting.

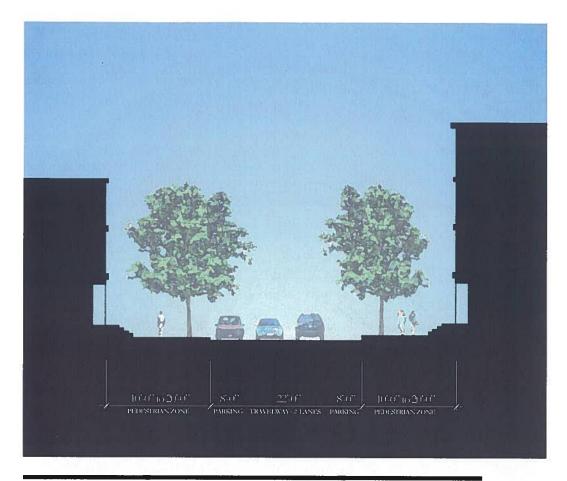


Type C Streets - Street

Type C Streets will be located throughout the Urban Center providing supportive connections from the Type A & B Streets. Type C Streets may act as primary approaches to office, hotel, retail, and residential buildings. While larger setbacks are allowed along Type C Streets, street design should ensure that the space between the buildings is appropriately scaled to neighboring uses and provides a comfortable pedestrian environment.

Design Standards for Type C Streets:

- 2 lanes (one in each direction) 11' travel lanes.
- On street parallel parking is not required.
- Where parallel parking is provided, curb extensions into the parallel parking areas at key intersections.
- Low design speeds.
- Maximum 20' curb radii at intersections with Type B & D Streets where practical, and 15' maximum at alleys where practical. Larger curb radii may be required at intersections with Dulles Center Boulevard.
- Sidewalks that are a minimum 5' in width.
- A minimum 4' planting and furniture zone between the face of curb and sidewalk. Planting need not be continuous but can provide breaks that may accommodate furniture or other features.
- · Provide pedestrian-scale lighting.



Type D Streets - Drive

Type D Streets will be provided in the primarily residential TC-3 Land Bay and should be designed to encourage a traditional urban residential streetscape. Type D Streets should be designed to ensure that the space between the buildings is appropriately scaled to neighboring uses and provides a comfortable pedestrian environment.

Design Standards for Type D Streets:

- Both two-way and one-way street circulation will be allowed.
 - •Two-way street sections should:
 - Provide 2 lanes (one each direction) minimum 11' travel lanes.
 - •One-way street sections should:
 - Provide a minimum 11' travel lane.
 - Ensure that overall street circulation is logical, clearly marked, and provides safe and convenient access to all areas of the neighborhood.
- On street parallel parking on each side of the street where practical.
- Curb extensions into the parallel parking areas at key intersections.
- Low design speeds.
- Maximum 20' curb radii at intersections with Type B & C Streets where practical, and 15' maximum at alleys and parking areas where practical. Larger curb radii may be required at intersections with Dulles Center Boulevard.
- Sidewalks that are a minimum 5' in width.
- Provide pedestrian-scale lighting.
- Wider boulevard street sections with a park-like landscaped median / green will be allowed. Where provided, street greens or medians should typically range from 20' to 50' in width, should be park-like in character, provide for pedestrian walkways, plantings, and landscaping to enhance the character of the street.

Building Development

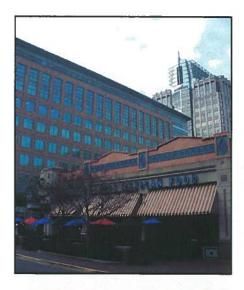
While streets create a framework for a successful Urban Center, buildings form the heart of the development and should be designed to foster active street life. These development standards should ensure buildings are oriented to the street with clearly defined entrances, promote human scaled massing and density to increase pedestrian comfort, and provide building articulation to allow pedestrians to relate to building scale.

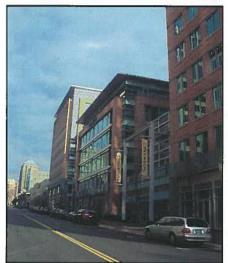
Building Massing and Height

- Variation of building mass and height is a critical part of a visually interesting and attractive Urban Center.
- Buildings should be designed with consideration to human scale and should include horizontal elements to break any expanse of vertical massing.
- Building design should clearly express a base, middle, and top to provide visual order to the building and relate buildings of varying massing and height.
- While building height should vary throughout the center, buildings should:
 - Not exceed 200 feet in the TC Core.
 - Not exceed 135 feet in the TC-1 & TC-2 Fringe.
 - Not exceed 60 feet in TC-3.
 - Buildings with office as the primary use will have a minimum of 4 stories.
 - Buildings along Type A and B Streets will provide a minimum building height to street width ratio of 1:3 (Building Height: Street Width).



- Buildings that front a plaza, green, park, or public gathering space may have a height of 1 story.
- Buildings fronting Type A & B Streets may have a building height less than
 the 1:3 ratio provided they include design features such as extended parapet
 walls, false facades, towers with increased massing at corners and entrances,
 and other vertical projections to approximate the required building height.





Building Orientation and Assembly

- The principal entrance to all buildings in TC-1 and TC-2 shall be from the front sidewalk, public plaza, or town green.
- · Principal entrances facing a parking structure or parking lot are discouraged.
- · Secondary building access from parking areas are encouraged.

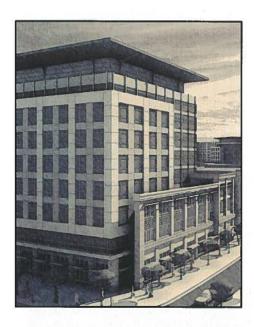
Building Articulation

As Loudoun County's only Urban Center, the architecture at Dulles Town Center should distinguish it as the County's premier mixed-use community. The buildings should draw inspiration from other notable urban centers, such as Tysons II, Bethesda Row and Reston Town Center, while striving to create its own unique identity. Architectural forms and features should be bold enough and clear enough to make each building easily comprehensible and allow pedestrians to determine a sense of scale. These architectural forms and features transform buildings from abstract volumes into backdrops for pedestrian activity. As such, the greatest level of detail is required at the ground level within close view of the pedestrian.

Many of these standards apply only in conditions where clearly visible from the public realm. The public realm should include the street and public parks, plazas, and other public gathering places. Side and rear building elevations not visible from the public realm should be well designed and in character with building fronts, but may not require the same level of detailing and articulation.

General

- Design, architecture, and materials of buildings should be compatible and harmonious. All aspects of the Urban Center should portray the highest standards of design and quality.
- Variations should be expected and allowed to occur as long as they are consistent
 with the intent of the Design Guidelines and add to the Urban Center's distinctive
 character. Distinctive and dramatic designs such as contemporary glazed facades
 should have considered placement with regard to other more articulated or detailed
 structures.





Building Articulation

Façade Treatment

- Building materials should be attractive in appearance and durable with a sense of permanence.
- Provide coordinated building compositions that use a system of building divisions consistent with human scale that promote and enhance the pedestrian street.
- Building and façade design should clearly express a base, middle, and top to
 provide visual order to the building and relate buildings of varying massing and
 height. Architectural elements and distinguishing features should be designed in
 proportion with the overall building. Careful application of building materials and
 finishes can contribute to a greater sense of weight at building bases.



- A sense of continuity should be maintained from one adjoining building to another although horizontal projections (base, belt courses, frieze panels, cornices) and other linear elements need not align precisely.
- Façade design may vary in height, material, and color along the street block.
- Long expanses of blank, featureless walls are discouraged. Building facades should provide architectural detail and windows wherever possible at the ground level to create visual interest and maximize outdoor surveillance and visibility.
- Rooflines should be visually articulated to provide visual interest and shadow lines.
- Rooftop equipment should take into account views onto the roof from adjacent structures. Rooftop equipment should be neatly organized and should be screened or concealed from public view as much as reasonably possible.

Canopies and Awnings

- The use of canopies and awnings, particularly along pedestrian oriented retail fronts, is encouraged as a means to enhance the pedestrian experience, promote retail and street activity, and increase visual harmony.
- Canopies and awnings should be incorporated into the building design and complement their architectural context while still providing establishments with the opportunity for individual expression.
- Canopies and Awnings frame entrances and serve to reinforce a sense of entry.



TOP



TC-3 Residential Neighborhood

Urban Centers require people to bring them to life and then keep them active on a 24-hour basis. The continuous use of the streets, shops, restaurants, and walks by residents and by those who visit, creates a comfort and interest that attracts newcomers and assures return visitors. The residential neighborhood proposed within TC-3 should continue the Urban Center's character by providing narrow tree-lined streets, human-scaled architecture oriented to the streets, on-street parking and rear parking courts, and a pedestrian oriented streetscape integrated into the Urban Center.

General

- A minimum of 70% of all ground floor building frontage situated on Hadley's Park Extended (as labeled above) shall be occupied by pedestrian oriented businesses.
- When completed in its entirety, a minimum of 80% of the residential neighborhood block frontage on Dulles Center Boulevard will be lined with buildings and consist of primary building facades. Block frontages for outdoor plazas, parks, and other outdoor gathering spaces are excluded from this calculation.

Orientation & Organization

- Primary building facades will be oriented to the sidewalk and the street.
- Buildings located at corners will have a primary building façade on both frontages.
- Principal entrances will be provided through a street level lobby and/or be directly accessible from the street.
- The neighborhood should develop along a rectilinear pattern of small blocks defined by streets that terminate in other streets.



Building Form

- Building forms and facades should be both urban and residential in character or form.
- Provide an ordered, human-scaled system of architectural elements on the building's face. Windows and doors should tend to align, and a sense of rhythm and pattern should be present.
- Stoops, porches, balconies, and other architectural features that provide a transition from the public to private realm are encouraged.

Street

- The streetscape should be designed to provide a pedestrian oriented neighbourhood per the design criteria of Type D Streets.
- On-street parking is encouraged.
- Off-street parking, whether surface or structured, shall primarily be located in the rear of buildings they serve and within the interior of blocks.



Parking

Structured Parking

Upon build out, structured parking is envisioned throughout the Urban Center.

- Structured parking, to the extent reasonably practical, should be designed to be
 within the interior of blocks and enveloped by buildings at street level along Type A
 and B streets. Exterior facades of any parking structure visible from the public
 realm will be designed in a manner that is integrated with nearby building
 architecture and/or shielded to the extent reasonably practical with landscaping and
 trellis work.
- Surface parking may be provided in phases as development occurs until the time that structured parking is necessary to meet the required parking standards.

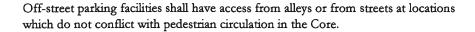




Surface Parking

While the majority of parking within the Urban Center will, upon build out, be provided in structured parking, surface parking may be used. Permanent surface parking lots will be allowed at full build out.

- Surface parking lots, including interim surface parking, shall primarily be located in the rear of the buildings they serve, within the interior of blocks and shall have access from alleys or streets which do not conflict with pedestrian circulation.
- At full build out, surface parking lots are prohibited from being located in areas which terminate a Type A or B street vista or abut a Type A or B street intersection.
- Surface parking areas should be landscaped and well-lit. Hedges, low opaque fencing, low walls, or berming should be provided to the extent practical to screen surface parking areas from adjacent streets.



All above grade parking structures shall be designed in a manner that is integrated with nearby building architecture to minimize visual impact.





Mass Transit Facility

Transit Facility

Given Dulles Town Center's designation as the County's only Urban Center and the County's need for a permanent consolidated transfer point for local bus routes, a Transit Facility is proposed within the Urban Center.

The Transit Facility will provide services including:

- Bus bays.
- An indoor waiting area with facilities to purchase transit fares, restrooms, a community meeting room, and access to wireless telecommunications service.
- · Bus shelter, outdoor seating, bike racks, and lighting.

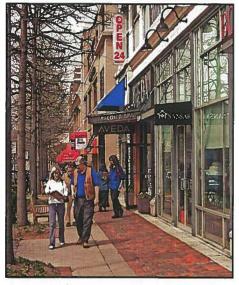
Commuter Parking Lots

Per the proffers, commuter parking lot(s) may be provided at The Transit Facility and/or in Land Bay OP-1.

Commuter parking lots will be:

- Designed with direct access to either Dulles Center Boulevard or Atlantic Boulevard.
- Signage will be provided to increase the visibility of the commuter parking lot and direct on-site circulation.
- Screened to the extent feasible with landscape plantings including low hedges.
- Bus shelter, outdoor seating, bike racks, and lighting.





Parks and Open Space

The Urban Center shall contain open spaces designed to create a vibrant public environment and provide links to other walkways and open spaces within Dulles Town Center. All residential dwellings and non-residential buildings will be located within walking distance (1500 feet) of a public gathering space.

Town Green

- A minimum 40,000 sf Town Green will be located consistent with Zoning Ordinance requirements.
- At least one side of the Town Green shall front a Type A or Type B Street, although at least one of either the Town Green or Civic Plaza will front the Type A Street.
- The Town Green will contain a well defined green space with landscaped areas that serve as a location for events, outside activities, and generally provide public gathering opportunities for residents, visitors, and employees of Dulles Town Center.
- The Town Green will be designed to be aesthetically pleasing and functional for
 pedestrians and may include public amenities such as ponds, fountains, ornamental
 lamps, terraces, waterfalls, sculptures and other public art, planted beds, benches,
 drinking fountains, clock pedestals, and awnings and canopies within the interior or
 edge of the main plaza.

Civic Plaza

- A minimum 10,000 sf Civic Plaza will be located within the Town Center Core.
- At least one side of the Civic Plaza shall front a Type A or Type B Street, although
 at least one of either the Town Green or Civic Plaza will front the Type A Street.
- The Civic Plaza may include extensive hardscaping.

Community Center

 A Community Center and pool facility will be provided within the Town Center to meet the recreation and amenity needs of the Urban Center's residents.

Accessory Open Spaces

Additional spaces within the Urban Center, such as smaller plazas, terraces, courtyards, and pocket parks will be incorporated into the design to provide a varied streetscape and pedestrian experience.



Stream Valley Plan

An open space and passive park will be provided along the perennial stream between the Urban Center and the existing Dulles Town Center Mall. This park will:

 Retain the perennial stream in its natural condition, limit impacts to associated wetlands, provide reforestation and naturalized planting areas, and allow for thoughtfully located pedestrian crossings between the Town Center and Dulles Regional mall.

Details of the Stream Valley Plan are provided on Sheets 10 & 18 of the Concept Development Plan and will include:

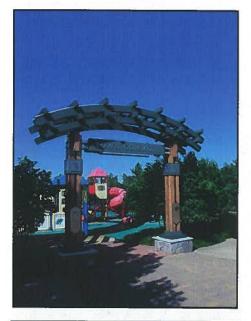
- a conservation plan to limit impact to the existing forest cover and create a tree reforestation area
- a 4' wide permeable surface trail within the stream valley. Final location of the trail
 will be field located to limit impact to the perennial stream, wetlands, and existing
 trees.
- locations for pedestrian connectivity between the Town Center and Mall.

Pedestrian Connectivity to the Mall

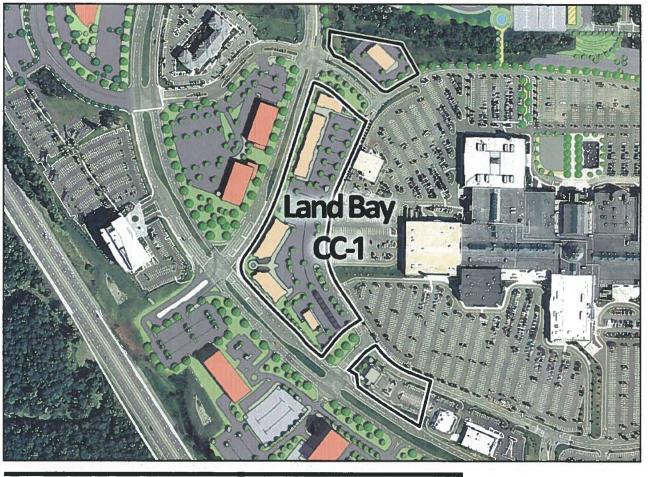
Easy pedestrian access to and from the existing mall represents a key asset for the Urban Center.

- To better facilitate pedestrian movement across the stream valley, a portion of Hadley's Park will be extended south across the stream corridor with a pedestrian cap. The location of the pedestrian cap at a previously cleared and channelized section of the stream corridor has been carefully selected to limit impacts to the stream and its existing tree cover, and will be landscaped and designed to serve as a community gathering space.
- An elevated pedestrian bridge crossing may be provided in the approximate location shown on the ZMAP Concept Development Plan (Sheet 10).
- The pedestrian cap and elevated pedestrian bridge will be designed to accommodate ADA accessible pedestrian crossings and will minimize impacts to the stream valley and its tree canopy.









The Commercial Center

section

Building Design & Orientation

The Commercial Center (CC-1) is planned to integrate a previously industrial land area into the commercial fringe surrounding Dulles Regional Mall and to act as a gateway into the Urban Center. The Commercial Center should be designed to complement the character of the surrounding land uses, and to include appropriate pedestrian linkages, both internally and throughout the greater Dulles Town Center community.

Building Orientation

- Buildings will be designed with the primary building facades oriented to Dulles Town Circle.
- Side and rear facades will be substantially consistent in detail with the primary façade.
- Landscaping and screening will be used to screen outdoor storage, areas for collection of refuse, and loading areas adjacent streets.



Building Massing and Height

Buildings within the commercial center will be allowed up to 55' in height, and to the extent practicable should be located along the frontage of Dulles Center Boulevard and Atlantic Boulevard.

Building Articulation

Façade Treatment

- Building materials should be attractive in appearance and durable with a sense of permanence.
- Building and façade design should clearly express a base, middle, and top to provide visual order to the building and relate buildings of varying massing and height. Architectural elements and distinguishing features should be designed in proportion with the overall building. Careful application of building materials and finishes can contribute to a greater sense of weight at building bases.
- Long expanses of blank, featureless walls are discouraged. Building facades should provide architectural detail and windows
 wherever possible at the ground level to create visual interest.
- Rooflines should be visually articulated to provide visual interest and shadow lines.

Canopies and Awnings

- The use of canopies and awnings, particularly along pedestrian oriented retail fronts, is encouraged as a means to enhance the pedestrian experience, promote retail and street activity, and increase visual harmony.
- Canopies and awnings should be incorporated into the building design and complement their architectural context while still
 providing establishments with the opportunity for individual expression.
- · Canopies and Awnings frame entrances and serve to reinforce a sense of entry.

Circulation & Steetscape Design

Circulation

Primary vehicular access to the Commercial Center will be from Dulles Town Circle.

Principal circulation within the Commercial Center is envisioned to be provided via private travelways and parking aisles.

Vehicular circulation will be designed to:

- · Provide for safe and logical points of ingress / egress
- · Minimize direct vehicular access to parking stalls from major travelways
- Provide other on and off-site improvements to enhance pedestrian and vehicular circulation.

Pedestrian circulation will be designed to:

- Minimize conflicts with vehicular circulation by providing major pedestrian walkways and delineating paths across major circulation travelways with striping and signage.
- Make provision for connections of internal walkways to regional trails and sidewalks.
- Provide for safe pedestrian crossings that include crosswalks and traffic control devices at major street intersections along Atlantic & Dulles Center Boulevard.

Streetscape Design

The major roadways bordering the commercial center will be designed with enhanced landscaping, pedestrian facilities, and entry signage and monumentation to signify a transition into the Urban Center.

Dulles Center Boulevard's streetscape between Atlantic Boulevard and the Urban Center will be designed to slow traffic and indicate a transition to a more pedestrian friendly environment. The streetscape should at a minimum include the following:

- Sidewalks that are a minimum 5' in width.
- Street trees should be provided at a minimum spacing distance of 1 per 40'
- A Type II Landscape Buffer
- Surface parking areas along Dulles Center Boulevard should be landscaped and to the extent practicable screened from the street with hedges, low opaque fencing, low walls, berming, or other landscaping.
- Other elements such as entry signs, monuments, decorative lighting, and specialized paveing materials should be provided to mark the transition into the Urban Center.

Atlantic Boulevard is a major collector road providing the primary route into and out of the commercial center from the surrounding community. The streetscape should be designed to preserve views into and out of the commercial center while screening parking and loading. The streetscape should at a minimum include the following:

- Street trees should be provided at a minimum spacing distance of 1 per 40'
- A Type II Landscape Buffer
- Surface parking areas along Atlantic Boulevard should be landscaped and to the extent practicable screened from the street with hedges, low opaque fencing, low walls, berming, or other landscaping.



The Corporate Office Park

Street Design

As part of previous development at Dulles Town Center, significant portions of the properties' ultimate planned roadway system have been completed. Traffic generated by The Corporate Office Park along Route 28 will be served by Atlantic Boulevard and Nokes Boulevard, both County designated major collector roads. Convenient access to Route 7 and 28, both principal arterials, is provided by two grade separated interchanges.

Internal Circulation

Principal circulation within The Corporate Office Park along Route 28 is envisioned to be provided via private travelways and parking aisles in a safe corporate park-like environment.

Vehicular circulation will be designed to:

- Minimize direct access to parking stalls along major approaches to building fronts and drop offs.
- Minimize conflicts with pedestrian circulation by providing major pedestrian walkways and delineating paths across major circulation travelways with striping and signage.
- Make provision for connections of internal walkways to regional trails and sidewalks.
- Provide for safe pedestrian crossings that include crosswalks and traffic control devices at major street intersections along Atlantic Boulevard.

Building Development

Buildings

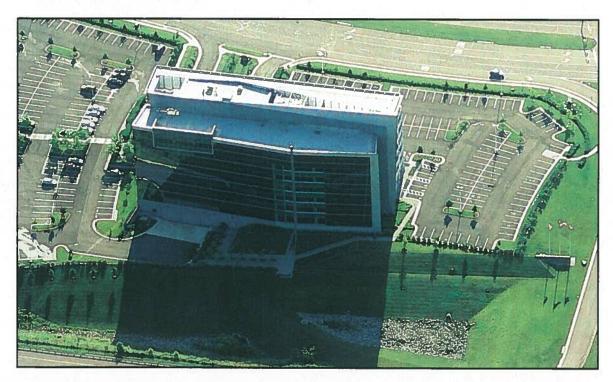
High quality, office buildings are envisioned as the predominant use of The Corporate Office Park upon full development, and will be designed to be the prominent feature when viewed from periphery roads. Existing 1 DTC, a Class A office building, should be used as an example of the quality architecture and site design planned along the Route 28 corridor.

Building Orientation and Assembly

- Buildings will be setback from major roads per the Concept Development Plan.
- Approaches to primary entrances should be clearly visible and accessible from major roads.
- Buildings will be designed with the primary building facades oriented away from Route 28.
- Side and rear facades will be substantially consistent in detail with the primary façade.

Building Massing and Height

With the exception of the NRU-CFC property located in Land Bay OP-2 (PIN 028-15-4517), office buildings within The Corporate Office Park will have a minimum height of 4 stories.





Parking

Structured Parking

Upon build out, structured parking is envisioned to allow the office park to develop at the planned density.

- Structure parking, to the extent reasonably practical, should be located to the side
 or rear of office buildings, and should be designed to allow office buildings to be
 the prominent feature along the Route 28 corridor, while still creating an
 attractive streetscape along Atlantic Blvd.
- Where visible from adjacent roadways, parking structure facades will be designed
 in a manner that is reasonably integrated with nearby building architecture and/or
 shielded by tree conservation areas, landscaping, and/or trellis work.
- To the extent reasonably practical, structured parking should be designed to take advantage of the site's natural grade change



Surface Parking

A combination of structured and surface parking will be provided within the Corporate Office Park.

- Surface parking should primarily be located to the front and side of office buildings along Atlantic Boulevard.
- Surface parking areas should be landscaped and well-lit. Hedges, low opaque fencing, low walls, or berming should be provided to the extent practical to screen surface parking areas from adjacent streets.



Parks and Open Space

Office Area

The Corporate Office Park along Route 28 is envisioned at a density supportive of a corporate park-like atmosphere that balances consideration for the sites natural features and the opportunity for a premier office campus along two of the County's primary transportation corridors.

Vestals Gap Park II

A section of Vestals Gap Road located in Land Bay OP-2 will be preserved within an approximately 7.7 acre park and dedicated to Loudoun County PRCS for public use. Part of a comprehensive trail and sidewalk system at Dulles Town Center, the park's design will include:

- An 8' permeable surface trail.
- A pedestrian seating node and interpretive signage describing the history of the road.
- Up to 5 parking spaces co-located within the adjacent office building parking and clearly designated by signage for park use.

Tree Conservation Areas

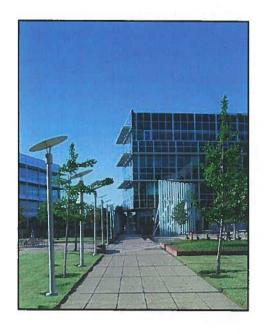
Portions of Land Bay OP-2 have been designated as tree conservation areas (refer to the Concept Development Plan). As planned development occurs respect should be given to the preservation of additional existing tree stands and natural features outside these conservation areas.

Civic Space

Per the Revised General Plan guidelines, at least 5.8 acres of the 115-acre portion of The Corporate Office Park along Route 28 are recommended for public civic uses. Office buildings may be designed to incorporate large plazas adjacent to primary entrances, to provide opportunities for events or otherwise for employees to gather outdoors and to serve as public and civic space for the enjoyment of the office users. Generally, each building should provide an area equivalent to approximately 5 percent of its total floor area in plazas and gathering spaces, although larger centralized public spaces may be created to serve multiple office buildings.







Pedestrian Circulation

A comprehensive network of trails and sidewalks will be provided throughout Dulles Town Center to link proposed uses with existing facilities (refer to Pedestrian Circulation Plan, Sheet 15).

8' asphalt trails as designated on the Pedestrian Circulation Plan will be designed to the following standards:

- 8' asphalt surface trail.
- Designed for 2-way traffic.
- Maximum cross slope of 2%.
- Provide for a minimum 2 foot clearance on each side where practical.
- Per AASHTO standards, where trail sections are adjacent to slopes down steeper than 1:3, a minimum 5 foot clearance from the edge of the trail to the top of the slope should be provided. In areas where the 5 foot clearance is not able to be provided a physical barrier such as dense shrubbery or railing should be provided.
- Provide for public access easements.
- Intersections should be designed to provide stop bars in advance of trail crossings for both vehicles and trail users.
- · Crosswalk markings should be provided at intersections.
- Signage including stop, yield, caution, and bike/ped crossing, should be provided where necessary.
- Where practical trails located adjacent to a roadway should provide an 8 to 10 foot setback from the back of curb.



A DEVELOPMENT OF



Prepared By:

